



Backend Engineer Assignment

We're excited that you're interested in joining our startup! As part of the evaluation process, we'd like you to build a small-scope **social-media style backend** and, just as importantly, see how you plan, develop and test a backend application.

Assignment Brief

Build a minimal backend that supports:

Capability	Details
User graph	<ul style="list-style-type: none">• Follow / unfollow users• “Followers” and “Following” lists
Posting	<ul style="list-style-type: none">• Create posts with text and media input.• Retrieve a timeline/feed for the user• Retrieve all the posts of the user
Tech stack	<ul style="list-style-type: none">• Node 18 +• Neo4j 4.x or Postgres 15• Choose one API style:<ul style="list-style-type: none">▫ GraphQL queries & mutations OR▫ REST with Express.js
Authentication	A lightweight scheme is fine (JWT, session cookie, or basic header).

What We're Looking For

- Clean, idiomatic JavaScript / TypeScript (preferred)
- Clear data-modeling of the social graph in Neo4j (nodes, relationships, indexes) OR Postgres (tables, joins, indexes)
- Thoughtful API design (Routes or GraphQL schema) and well-structured folder layout
- List of test cases that demonstrate the understanding of the system (addition of code-level automated test cases is not required)
- A concise README that explains setup, decisions, and trade-offs
- A hosted backend that enables access of the APIs/Queries from anywhere.

Bonus points for: Dockerisation and Security considerations.

Use Your Judgement

Some details have been left open on purpose. If something is ambiguous, make a reasonable decision—then document the assumption in your README. Creative solutions are welcome!

Delivery & Presentation

Kindly email your submission **within 48 hours** of receiving this assignment with the details that are provided in the checklist below.

Submission Checklist

- Github/Bitbucket repository link.
- A link that hosts the backend.
- Postman collection or GraphQL Playground link that can be used to test the APIs or Queries-Mutations.
- A list of Feature Test Cases

Good luck — we're looking forward to seeing your backend craftsmanship in action! 

If you have any questions during the task, feel free to ask — or take initiative and show us how you think and work as a developer.